

REMARKS

Claims 1-21 are pending in this application. By this Amendment, claim 1 is amended and claim 21 is added. The amendments and added claim introduce no new matter. Support for the amendments to claim 1 can be found, for example, in paragraphs [0087]-[0089] of Applicants' disclosure, as filed. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representative by Examiners Hoban and Hailey in the April 10, 2008 personal interview. Applicants separate record of the substance of the interview is incorporated into the following remarks.

The Office Action rejects claim 12 under 25 U.S.C. §112, second paragraph. This rejection was discussed during the April 10 personal interview with the Examiners. The Examiners agreed that Applicants' disclosure adequately supports the use of the term "substantially" as used in the context of claim 12 (see, e.g., paragraphs [0096]-[0097] of Applicants' disclosure, as filed). Thus, it was agreed that this rejection would be withdrawn. Applicants appreciate this agreement by the Examiners.

The Office Action rejects claims 1-20 under 35 U.S.C. §103(a) over U.S. Patent No. 6,541,407 to Beall et al. (hereinafter "Beall") in view of U.S. Patent No. 5,976,478 to Swanson et al. (hereinafter "Swanson"). This rejection is respectfully traversed.

As discussed during the April 10 personal interview with the Examiners, it would not have been obvious to combine the references in the manner suggested by the Office Action. The Office Action concedes that Beall does not disclose, for example, a porous silica powder or a porous silica-containing compound, as recited in claim 1, or silica gel granules as recited in claims 19 and 20. The Office Action relies on Swanson to remedy this shortfall. The Office Action asserts that it would have been obvious to combine the allegedly corresponding features of Swanson with Beall because Swanson discloses the silica as useful in catalyst

monoliths. The Office Action does not cite to a specific portion of Swanson in support of this assertion.

During the personal interview, the Examiner indicated that the discussion of the silica as a catalyst support at col. 1, lines 25-30 and col. 5, lines 31-35 of Swanson was the alleged support for this assertion. However, the broad assertion in Swanson, that silica may be used as a catalyst support, is not sufficient to render obvious the alleged combination of features at least because this would not have yielded a predictable result in view of the teachings of the applied references, or other objective evidence of record.

For example, Applicants discuss the use of pore-forming agents in the specific process of the present subject matter, and highlight that not all pore-forming agents are appropriate for such a process. The Office Action fails to provide a sufficient articulated reasoning with a rational underpinning to conclude that the Swanson particles could be used with a reasonable expectation of success in the Beall method. Applicants discuss, for example, in paragraphs [0002]-[0004] how various pore-forming agents are undesirable and/or unsuitable for particular processes based on increases in firing time, production of carbon dioxide or toxic gas during firing, crushing of the pore-forming agent during kneading, deaerating, or problems with forming. As such, it cannot simply be assumed that one of ordinary skill in the art would have combined the allegedly corresponding features of Swanson with the Beall method to arrive at the subject matter of the pending claims.

Additionally, as would be understood by one of ordinary skill in the art, if boron is contained in a starting material for forming cordierite, the resultant cordierite honeycomb structure has prohibitive drawbacks such as a high coefficient of thermal expansion and poor thermal shock resistance, because boron adversely effects the orientation of cordierite crystal structures. This fact is well established among those of ordinary skill in the art in the honeycomb structure industry. As such, one of ordinary skill in the art would not attempt to

combine the teachings of Beall with Swanson at least because the porous silica produced by the method disclosed by Swanson requires the use of boron, as discussed at col. 3, lines 23-35 of Swanson, which is not apparently compatible with the objectives of Beall to produce a cordierite honeycomb structure with limited coefficients of thermal expansion.

These arguments were discussed during the April 10 personal interview with the Examiners. The Examiners agreed that further review of the combination of the applied references would be appropriate upon submission of a formal response. Applicants appreciate this agreement by the Examiners.

Without conceding the interpretation, or application, of the applied references, and solely to advance prosecution of this application, independent claim 1 is amended to recite, among other features, a ceramic porous body having partition walls having pores and a porosity of at least 40%, said pores being formed mainly by virtue of a porous silica powder or a porous silica-containing compound. The applied references do not teach, nor can they reasonably be considered to have suggested, such features. For example, Beall discusses, at col. 3, lines 7-20, a specific approach including multiple sources. This method cannot reasonably be considered to correspond to the features recited in claim 1, even in view of Swanson.

Regarding claim 12, the Office Action relies on Swanson as allegedly disclosing silica gel granules that do not substantially include particles with a particle size exceeding 100 μm . The Office Action relies on Table 1 of Swanson as allegedly disclosing these features. However, Table 1 of Swanson specifically includes particles with a maximum diameter of 105 μm and there is no indication regarding the level of particles exceeding 100 μm . As such, Swanson does not teach the relied-upon features.

For at least the above reasons, the applied references do not teach, nor can they reasonably be considered to have suggested the combinations of features positively recited in independent claims 1, 9, 19 and 20, and dependent claim 12. Additionally, claims 2-8, 10, 11 and 13-18 would also not have been reasonably suggested by the applied references for at least the respective dependence of these claims, directly or indirectly, on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-20 is respectfully requested.

Added claim 21 is likewise allowable at least for the reasons discussed above, as well as the additional features that this claim recites. For example, claim 21 recites, among other features, adding silica powders containing substantially no boron therein or powders of a porous silica-containing compound containing substantially no boron therein. The applied references would not have reasonably suggested such a combination of features.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-21 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Petition for Extension of Time
Amendment Transmittal

Date: April 23, 2008

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